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dealeror write descriptive literature.

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## American

Cover photo by Heilman shows strawberries on the farm of Dave Stauffer, Lititz, Pa.

**VOL. 81** 

**APRIL, 1961** 

No. 4

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#### LETTERS TO THE EDITOR

#### Here's How a "Sooner" Does It

Dear Editor:

I've been a reader of AMERICAN FRUIT GROWER for a number of years, and I get lot of worthwhile information from it, although some ideas apply better to one part of the country than another.

I want to differ in particular with an idea presented by Frank Street in your February issue where he seems to advocate permitting, yes even encouraging, peach trees to lean with the wind. Under Okla-homa conditions this would be ruinous, for if we let the southwest side of young trees be bare, they would likely sunscald, and that's just the beginning of serious trouble. Next thing is that the borers start work in the scalded bark and end up girdling the whole tree

Here in Oklahoma, where high winds and hot sunshine prevail, we've found it's best to trim all our fruit trees back severely at first and also to keep all the shade we can for the southwest side of the trunks. I even tie any available limbs so they shade the trunk from the hot afternoon sunshine.
Keeping trees headed low also lessens danger of wind damage.
Norman, Okla.
David V. Phillips

#### Fruit Scarcity Creates Problem

Dear Editor

I notice that you encourage letters to the

I have been operating a cider mill for 22 years and sell mostly retail, with some sales in the wholesale field. I have been buying my apples in Orange and Ulster counties, New York, for the last 15 or 20 years.

It is incredible to think how some growers have been in selling cider apples this past fall, because of the current apples this past rail, because of the current scarcity of apples. Even growers with whom I have dealt for the past 12 or 15 years have been packing as "ciders" apples which should never have left the ground or been considered available for human

consumption in any shape, manner, or form.
Where is the National Apple Institute?
Caldwell, N.J. Sydney Handleman

#### Consumers Influence Quality

Dear Editor:

I was very much interested in the letter apple quality in your January issue. This is a very real problem, and the con-sumer must share a considerable responsi-

bility for the situation.

Generally speaking, fruit growers and their customers cannot have both maximum color and peak condition at the same time. If apples are left on the trees (particularly varieties like Delicious and Cortland) until they reach maximum color, they have then passed the peak of "condition." We in our own orchard attempt to harvest the fruit at or near the point of maximum condition. And we are frequently told by buyers and consumers that our fruit lacks full color. This we readily admit but stoutly defend our fruit against some of the "red

we have lost sales of Cortland and McIntosh because of insufficient color to better colored fruit so aptly described by Michael Grogan. Too many consumers buy apples solely on the basis of color, Hilton, N.Y. Ralph G.

Ralph G. Palmer

## "Getting back on the job in an hour saved me \$250"

reports Robert McNinch, Mac-Beth Farm, Belmont, N.Y.





WITHIN MINUTES OF A TROUBLE-CALL from Bob McNinch, M. & W. Tire Co. "rep" Alvin Jordan reached Mac-Beth Farm. He quickly installed a free "loaner" to replace a tractor tire that had been damaged beyond repair. Just one hour after the accident, the tractor was back planting oats again. According to McNinch, this speedy service saved \$250 - the wages of his extra field hands who would have been idled the rest of the day without the tractor.

#### THE NEXT MORNING AT 7 A.M.,

Jordan returned to replace the "loaner" with the new Goodyear tire McNinch needed. It was expertly installed - inflated-liquid-weighted, in time for a full day in the field. That's all part of the "Extra Hand" service that has helped keep McNinch a Goodyear tractor tire user for the past 18 years. Another big reason he's a Goodyear fan: Goodyear famed Sure-Grip quality gives him 1,000 hours of peak performance a year - year after year.

It's easy to see why farmers the country over are loyal to Goodyear. They know that Sure-Grip Tractor Tires feature super-tough rubbers teamed with exclusive Triple-Tempered cord for bonus mileage. And every mile of it, those ruler-straight, gear-like lugs deliver exceptional traction.

To save money on tractor tires that are the biggest dollar's worth today-or to save time in emergencies through "Extra Hand" service - call your Goodyear dealer! Goodyear, Farm Tire Department, Akron 16, Ohio.

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2 Furnish "loaners" while your tires are being 5 Minimize down time through expert help on tire maintenance.

- 3 Take care of your bat-tery needs.

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With the all-new Model 200 C.P., John Bean offers a compact, versatile Speed Sprayer in the attachment price range. Designed especially for the grower with a small acreage of large trees or a medium acreage of small trees, the new 200 C.P. gives you big Speed Sprayer features at an attractive price. Tandem wheels that are specially designed for added flotation also make possible a narrow tread width for spraying closely planted trees and bush-grown crops. Sprayer quickly adapts to one or two-way delivery. Features include convenient, tractor-mounted controls, "Bean Bond" rust and corrosion proof tank, adjustable external air deflectors, rugged Royalier high pressure pump and a clutch that permits the fan to be stopped while engine and pump continue operating.

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- . CLEAN BARNS

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#### Calendar of Coming Meetings & Exhibits

Apr. 2—Michigan Nut Growers' Association annual meeting, Michigan State University, East Lansing.—Michigan State University Information Services, East Lansing.

Apr. 9-12—National Association of Produce Market Managers convention, Ocean Forest Hotel, Myrtle Beach, S.C.—Jules S. Cherniak, Sec'y-Treas., Dv. of Markets, New York State Department of Agriculture & Markets, State Office Bidg., Albany 1.

Apr. 27-29—Shenandoah Apple Blossom Festival, Winchester, Va.

May 46—Washington State Apple Blossom Festival—Mrs. Ginny Hopkins, Publicity Director, 128 S. Wenatchee Ave., Wenatchee.

May 26-27—Edible Tree Nut Conference, University of California, Davis.

June 13-16—National Apple Institute annual

June 13-16—National Apple Institute annual teeting, Browns Lake Resort, Burlington, Wis. -Patterson Bain, Exec.-Vice Pres., Washington ldg., Washington 5, D. C.

June 15-Small Fruits Day, Ohio Agricultural Experiment Station, Wooster.

June 19-24—Pacific Division American Asso-ciation for the Advancement of Science, Univer-sity of California, Davis.

June 2º-Summer Orchard Day, John Tanner Orchards. Speer, Ill.—Bob Rogers, See'y-Treas., Illinoir State Horticultural Society, 305 W. Wal-nut St., Carbondale.

June 28-Fruit Day, University of Connecticut, Storrs.-B. T. Peck, Sec'y, Connecticut Pomolog-ical Society, Lakeside.

July 24-26 — International Apple Association annual convention, Hotel Sherman, Chicago, Ill. —Fred W. Burrows, Executive Vice President, 1302 18th St., N. W., Washington 6, D. C.

Aug. 3-Orchard Day, Ohio Agricultural Ex-periment Station, Wooster.

Aug. 22-23—Ohio Pesticide Institute, Ohio Agricultural Experiment Station, Wooster.
Aug. 25—Maine Blueberry Festival, Union Fair Grounds, Union.—Ivan Sherman, Chairman,

Sept. 14-16—Texas Citrus & Vegetable Grow-s & Shippers convention. Shamrock Hotel,

Oct. 29-Nev. 1—National Agricultural Chemicals Association annual meeting, The Homestead, Hot Springs, Va.—L. S. Hitchner, Executive Sec'y, 1145 19th St., N. W., Washington 6, D. C.

Nov. 15-17—Oregon State Horticultural Society annual meeting, Oregon State College, Corvallis. —Andrew A. Duncan, Sec'y, Oregon State Col-lege, Corvallis.

#### THE **OUESTION BOX**

#### SOIL TESTING OUTFITS

Who has small soil analysis kits?—Tennessee.

Sudbury Laboratory, S. Sudbury, Mass.; Edwards Laboratory, Norwalk, Ohio; Florist Products, 1843 Oakton, Des Plaines, Ill.; Kel Engineering & Equipment Co., Box 744, New Brunswick, N.J.; LaMotte Chemical Products Co., Chestertown, Md.; Stoller Research Co., P. O. Box 1071, Santa Cruz, Calif.

#### PLASTIC FILM FOR STRAWBERRIES

I noticed the item in January Fruit-O-Scope telling how the use of plastic film will increase strawberry production in Florida. Where can I get further information?—Arizona.

Experimental work on this is being done at Strawberry Investigatitons Laboratory, Plant City, Fla. Write Dr. A. N. Brooks, Plant Pathologist.

#### HE'D LIKE TO BUY ONE

Who makes the Potts 7-HP mist blower pictured on page 36 of your February issue?-

S. F. Potts, Crawford, Miss.

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Positive control even when problem insects threaten.

Economical because broad spectrum effectiveness permits simplified spray program-reduces number of applications and pesticides needed.

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Aphids

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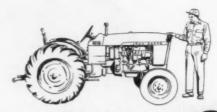
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## Fruit Grower

· Fruit for Health ·



Two-year-old apple tree after receiving two consecutive yearly applications of Simusine.



Chemical weed control has proven successful in tests in established plantings of apricots.

# Be Your Own WEED CONTROL EXPERT

With the help of herbicides now on the market and some careful study and testing you can do a good job of controlling weeds

> By S. K. RIES Michigan State University, East Lansing

NOW weeds under fruit trees can be controlled effectively without injuring the trees. Weeds, particularly perennial grasses, compete with trees for moisture and nutrients. They also provide cover for mice and interfere with the fruit harvest. The competition of weeds in orchards is not easily seen because the trees often do not show any symptoms of retarded growth.

The results of weed competition for nutrients and moisture have often been demonstrated. For example, research at Michigan State University has shown the value of the chemical weed killer Simazine. Apples, peaches, and cherries grown in areas treated with Simazine for two consecutive years had trunk diameters of 24, 7, and 11%, respectively, greater than trees which were hoed once. The trees were one year old when first treated. Simazine controlled annual weeds, alfalfa, and quackgrass.

Just why haven't weed killers been used much in orchards? There are probably four reasons:

1) Until recently there have been no chemicals that could do the job effectively without injuring the trees.

Many growers do not believe that these chemicals will really control weeds.

3) In some instances there has not been clearance of the herbicide by Food and Drug Administration. Of course, the grower can be assured that a chemical package label recommending use of any chemical for a specific purpose is evidence that it has been cleared by authorities. Therefore read the label.

4) Finally, one of the major reasons for not using herbicides is that many growers have not learned how to use herbicides or do not believe it is important to spend time learning.

There are herbicides available now to do the job and they do not injure the trees. With some careful study and testing, you can become a weed control specialist.

What is a good weed control program for tree fruits? In established (Continued on page 36)



Quack grass is controlled around bearing apple tree with 10 pounds per acre of 85% dalapon.



Simazine (4 pounds per acre) controls annual weeds around bearing cherry in background.

# Harvest of PERPETUAL CRISIS

Bargaining efforts are threatened as California cling growers and processors wage cold war

By WILLIAM J. MONAHAN

Special California Correspondent

N almost every year for 40 years the world's largest crop of processed fruit, the golden cling, has been afflicted with every variety of crisis known to Agriculture until in the 1960's there seems to be a harvest of perpetual crisis.

Latest is the "cold war" that has developed between California Canning Peach Association, bargaining agent for half of California's clingstone peach growers, and a clique of cannery interests who believe the association has become too "brash and bold" for its "britches."

Association leaders, at annual district meetings, have warned members that bargaining relations with cannery interests are strained, and a major hazard in 1961 will be the patching of differences between the bargaining agency and the packers.

The association management is, if anything, minimizing the situation. There is deadly serious possibility that a gambit will be made in the next peach season to deflate the peach association's position in the cling industry in much the same fashion as the bargaining effectiveness of California Tomato Association was destroyed two years ago.

So dangerous is the situation for grower organizations that a move will be made in the 1961 California legislature to enact laws compelling processors and prime handlers to recognize bargaining associations as agents of individual growers.

individual growers.

This will be an unpleasant pill for processors to swallow if it becomes part of the state's statutes, although it is medicine that could have been avoided if there had been more

co-operative understanding between grower and packer.

It may be no coincidence that sales of canned clings between June and November of 1960 trailed far behind the sales of 1959-60. A lower volume by more than 1.7 million cases can certainly be attributed to a higher prevailing case price to the retail market. A continuation of the trend would confront the industry with a carryover in cannery hands of more than 4 million cases at bargaining time this year—a sure fire depressant for farm prices.

Further indications that the campaign to undermine the peach association's prestige is more than a playful gambit in the annual pastime of commodity bargaining were visible in sharp criticisms publicized in *California Fruit News* which frequently sounds off as unofficial spokesman for canneries.

The principal theme of a series of articles was that grower leadership was "irresponsible" in not assuming total blame for overproduction and in bargaining "too hard" for price and tonnage. The first contention is nonsense and the second indicates amazing arrogance.

Actually, there are a multitude of reasons for overproduction in clings with cannery responsibility as well defined as grower culpability.

Between 1947 and 1960 bearing acreage of clings increased in California from 46,300 acres to 52,600 acres. Much of this planting was encouraged by canners through direct and indirect financing. But during this same period when acreage increased about 13%, packers were improving their case yield from an average of 41.75 cases per ton to 55 cases—an increase of almost 33½%. New

acres and higher yield per acre in the production industry did not equal this packer contribution to total supplies.

The root of the trouble in clings as in most specialty crops is that fundamentally most of the old line packing executives do not want to bargain, on tonnage and price. Their inclination is to determine what pack can be easily marketed and to use the bargaining associations as a handy messenger service to relay supply figures and market prices to growers.

Yet, the economic salvation of cling growers is totally dependent upon bargaining strength. In these times they cannot for long assume the total burden of adjusting the obvious oversupply to demand although for all practical purposes this has been their position for the past few years. With grower costs running on the average well above \$600 an acre, it has been virtually impossible for an average producer to deliver enough fruit to balance his books.

In the peach belt during the 1960 season it is estimated that the average grower was paid for 934 tons per acre at an average rate of \$56.95 a ton. This included grade premiums and hauling payments which canners apparently want to make part of the basic price.

To ease their conscience several packers have attempted to decry grower production cost claims.

In California Fruit News, where growers were scolded for not accepting a canner price suggestion of \$50 a ton as a means of discouraging high cost-low production growers, it was contended that peach growers were distorting their cost-income situation. The articles even inferred that a typical grower should harvest 20 tons or more salable fruit per acre.

This attack on production cost claims flies in the face of objective reporting of cost figures by University of California.

Recently, Sutter County Farm Advisor George Post announced rising costs had outdated his 1958 survey of production expenses for better orchards showing charges at \$606 an acre, and that a new survey is now being made. In Butte County, in the spring of 1960, Farm Advisor Art Retan and University Extension Economist P. S. Parsons published a report showing cling costs per acre at \$851.88. In Stanislaus County two years ago cling expenses were set at \$636 an acre. The Sacramento Valley survey of Economist Arthur Shultis revealed costs per acre at \$656.58.

In almost every survey, the anticipated salable deliveries were fixed at 13 tons.

In the 1960 season salable deliveries didn't average 10 tons and in the (Continued on page 46)

# Insure a Good Fruit Set in SWEET CHERRIES

Plant pollinating varieties if you're setting out a new orchard. If your orchard is already established, bees will prove helpful

#### By RICHARD WELLINGTON

New York Agricultural Experiment Station,

PRIOR to the twentieth century little or no attention was paid to sweet cherry pollination. Most cherry growers grew a number of varieties and fortunately they were usually inter-compatible. Another picture arose the early part of this century in the Northwest. Bing, Lambert, and Napoleon (Royal Ann) were planted in large acreages in Oregon and even during favorable weather conditions their production was unsatisfactory.

Dr. V. R. Gardner and his associates at Oregon Agricultural Experiment Station found that all the sweet cherries tested were not only self-incompatible (self-unfruitful) but that Bing, Lambert, and Napoleon were inter-incompatible. They also found that it was advisable to include in their plantings of these kinds a compatible variety such as Black Tartarian and Republican.

Fortunately, inter-incompatibilities in sweet cherries are not common but in setting out orchards they are an important factor. In England and Germany the investigators have found numerous inter-incompatibilities but this is due in part to the presence of several strains within a so-called variety.

Our main trouble may be due to planting misnamed varieties. For example, New York State Agricultural Experiment Station had difficulty in procuring the true Bing Finally, buds of the Bing were procured from a California association distributing buds true to name.

George H. Dickson, Vineland Horticultural Station, Ontario, Canada, writes that at one time Black Eagle, Black Tartarian, Yellow Spanish, and Napoleon got mixed in some of their nurseries.

Emperor Francis, a promising European cherry, has been added to the inter-incompatible Bing, Lambert, and Napoleon group. The Deacon, in the Northwest, and British Columbia, was recommended for a number of years as a desirable polli-

nator for these varieties, but it is now being replaced by Van, a more valuable variety. Other desirable compatible pollinators that might be noted are Giant, Hedelfingen, Sam.

Six incompatible groups of lesser value are Early Purple and Rockport, Advance and Rockport, Windsor and Abundance, Black Tartarian and Knight's Early Black, Black Tartarian and Early Rivers, and probably Venus and Windsor.

The promising new varieties and unnamed sweet cherry seedlings that have and are being produced in New York, California, Washington, Canada, and Europe are being tested for their compatibilities.

It is well known that the closer the pollinator is to the variety to be pollinated, the better the set, especially during cold wet seasons. Two and not over four rows of any one For insurance, especially during adverse seasons, some growers scatter strong bee colonies throughout their orchards. One colony to the acre is the general recommendation.

Controlled investigations are a necessity in testing compatibilities. Guesses are out of the question. Cherry buds prior to bloom may be either covered with white paper bags or the whole tree may be enclosed in a cage covered with cheese-cloth. As all sweet cherry varieties are self-incompatible, it is unnecessary to remove the stamens. Uncontaminated pollen of the selected pollinator is applied to the stigmas during the height of bloom.

After pollination the bag, if used, must be replaced to prevent contamination. When the pistils have dried up, the paper bags should be replaced by netting sacks, to provide



Colonies of honeybees in a cherry orchard. One colony to the acre is usually recommended.

variety are recommended. A minimum number of pollinators is one in the center of eight trees, that is, each tree being adjacent to the pollinator.

If a grower has unfortunately planted incompatible varieties, grafting of compatible kinds is a recource. While waiting for the grafts to bloom, bouquets of compatible kinds should be distributed throughout the orchard.

better ventilation and more sunlight. The fruit set gives the answer to

the compatibility. Such tests are tedious and exacting.

The sweet cherry grower must be aware of the compatibilities of the varieties that he is planning to plant, for it is far easier to avoid mistakes than to remedy them. Before planting a large block of a new variety, the grower should consult with his experiment station.

The End.

#### How and Why These Two California Growers Grow Their Own

## PEAR STOCK

By RUSSELL H. GRIPP

Lake County Farm Advisor, Kelseyville, Calif.

N 1956, when George Young and Lester Boardman of Lakeport, Calif., began making plans to plant a Bartlett pear orchard, they hit upon a scheme to lower initial starting costs. Instead of purchasing top quality budded or whip-grafted nursery trees at a cost of approximately \$1 each in lots of 100 or more, they decided to grow the trees themselves.

In 1957, they secured domestic French pear seeds and planted them near the homestead so that the seedlings would be convenient to care for. The following winter the new growers purchased several thousand yearling rootstocks at approximately 15 cents apiece and set them out in the field for another year's growth.

The young trees were set about 6 inches apart in rows spaced wide enough for a tractor to pass through. Irrigation was supplied by panel checks thrown up between and parallel to the nursery rows. During the summer of 1958 the rootstocks grew vigorously, some of them to a height of 4 feet or more.

In January, 1959, Young and Boardman began to plant their pear orchard. The nursery stock was lifted by tractor and transported to the orchard site for planting on the quincunx. Alternate rows were spaced 16x24 feet with a filler tree in the open center. This arrangement is the quincunx or, as some people call it, the diamond.

A planting team of three men using planting boards planted the previously staked-out site at the rate of 80 trees per hour. Boardman and a neighbor were able to graft 60 trees per hour.

Boardman prepared the Bartlett scions which he inserted as whip grafts. He used 1/8x4-inch rubber bands to make six to eight wraps around the graft unions. The neighbor applied hot wax to the new grafts.

Planting costs of a home-grown

ers use a tractor-powered auger to dig planting holes, the much larger size and depth of these holes means that more care and effort must be exercised during planting.

A planting team, such as the one used by Young and Boardman, was able to dig, place, and plant a tree in less than three minutes. Of course,



Lester Boardman whip grafts Bartlett pear in new orchard. He averages 60 grafts per hour.

growers planting trees with less extensive, more shallow root systems would need to water the trees adequately and control weeds.

The Young and Boardman orchard is expected to come into production at five years of age. Pruning has



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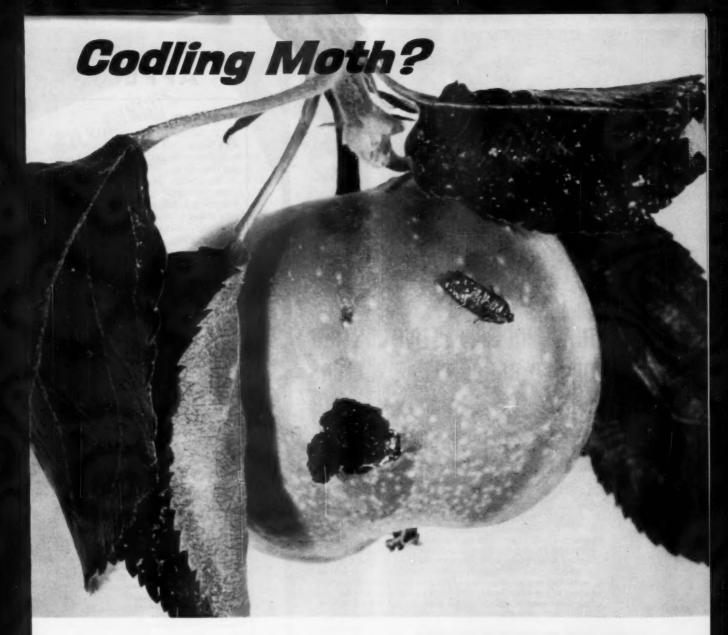
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tree as compared to a nursery-grown tree are shown in the table above.

During the 1959 and 1960 planting and grafting operations, no more than eight or 10 trees died or had grafts fail. By January, 1962, Young and Boardman expect to have 70 acres planted with 226 trees to the acre.

The loam or gravelly loam type soils in the Young and Boardman orchard make the planting job easier than it would be on a heavy clay or clay adobe soil. Although many growbeen held to a minimum and, in some cases, trees have not been touched with pruning equipment. Several trees that were planted and grafted in January, 1959, produced an extensive set of fruit buds during their second season of leaf growth in 1960.

At present, the specter of pear decline makes it important for orchardists to reduce costs wherever possible. Home growing and propagating the trees as Young and Boardman did is a good example of economy. THE END.



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#### APPLES

#### **Water-Core Sorter**

AT Beltsville, Md., USDA is trying to find ways to tell how much water core exists in an apple (without cutting it) and how this relates to its storage life. A new piece of equipment has been developed which, the scientists hope, will be able to separate water-core apples from other apples. Preliminary tests have been promising.

Once the water-core apples are successfully separated, scientists need only to determine how long these apples can be stored safely.

Water-core apples marketed right after harvest make good eating. But, if the water core is severe, the apples

#### THINNING AND STOP-DROP SPRAYS CAN BE USED IN 1961

ACCORDING to the Summary of Registered Agricultural Pesticide Chemical Uses, USDA has approved for commercial use the plant growth regulator naphthaleneacetic acid as a thinning spray on apples and as a preharvest drop control spray on apples and pears.

Naphthyleneacetamide has also received USDA approval as a chemical thinning spray for use on apples.

For peach thinning, a formulation of naphthylphthalamic acid (NPA) has official clearance for grower use as directed on the label. The product is Nip-A-Thin (Chemlay Products Co.), a powder formulation of NPA.

The dinitro spray, DNOC, has been approved for thinning blooms of peaches, apricots, plums and prunes, and apples, and DN-289 may be used for thinning blooms of apricots and plums and prunes.

To control fruit drop, 2,4,5-TP has received official approval as a preharvest drop spray on apples.

frequently turn brown in storage. Or, worse yet from the marketing point of view, they brown after the consumer buys them.

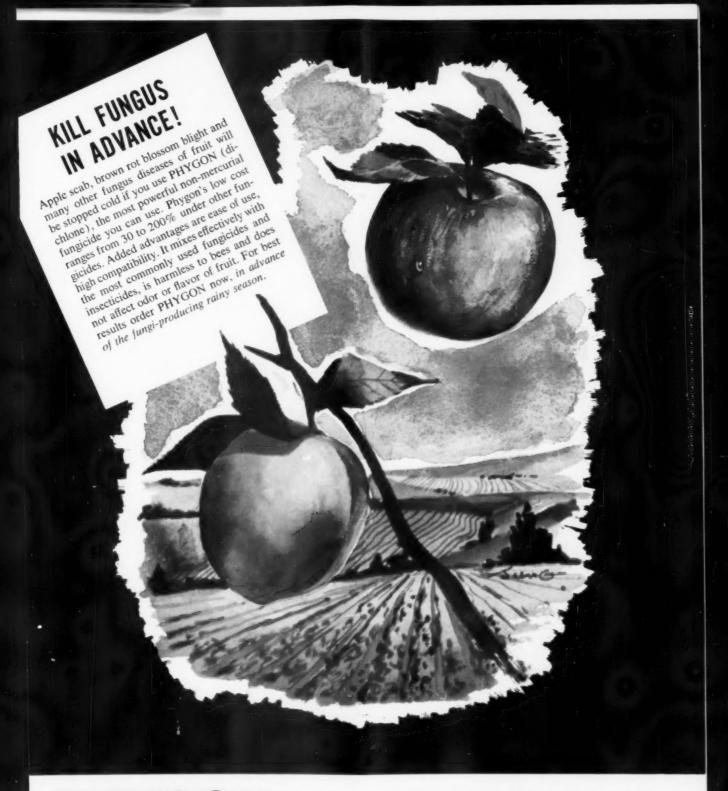
The new sorting device may mean that marketing of water-core apples will no longer be a problem.

#### PEARS

#### The Brighter Side

"DON'T be in a hurry to pull trees which appear to be in early stages of decline, especially if you think they are on domestic or French roots," Pomologist William Griggs told growers during Pear Day at University of California, Davis.

He pointed out that latest surveys



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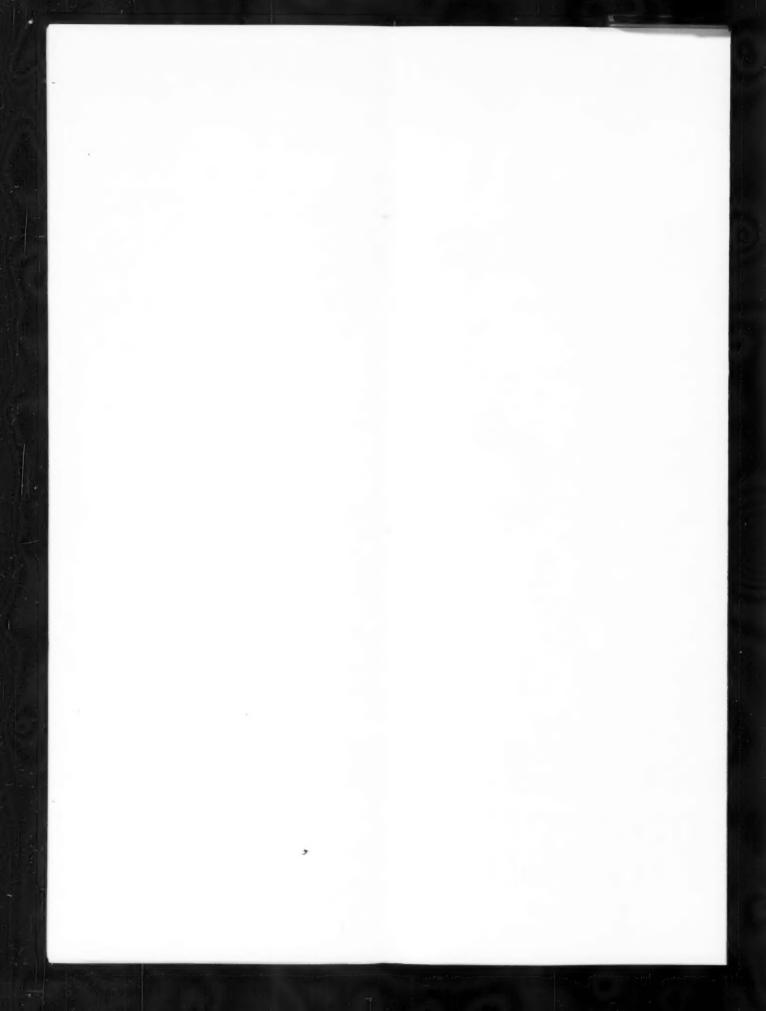


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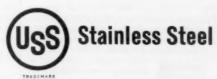


The C. D. Liquid Fertilizer Corporation of Liberty, Indiana, produces complete liquid fertilizers and chemical solutions. The highly corrosive compounds in these liquids would play havoc with equipment that's made of ordinary materials. So they chose Stainless Steel equipment to handle the corrosion problem. Mr. E. E. Crouse, President of C. D. Liquid Fertilizer Corporation says, "You just can't beat Stainless Steel . . . it virtually eliminates corrosion problems and replacement of tanks.

"Stainless Steel tanks are safer and easier to clean out. Stainless' smooth surface leaves no place for foreign material to cling or hide. Screens, booms and nozzles remain open. This eliminates poor jobs, keeps customers satisfied and naturally means more business for us. We use nothing but Stainless Steel for booms and nozzles, pumps and fittings."

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For as little as \$650 you can have a Fitchburg Farm Chipper working for you in your orchard this summer; or the heavy duty brush and bedding chipper can be bought for \$960. Either will give

you a good cost return in labor saving and increased fruit production.



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from Oregon and Washington, where pear decline has had a longer history than in California, indicate that many trees on imported French or domestic roots are in better shape than they were in 1956-and very few are worse. Although two-thirds of the northwestern pear trees on Oriental rootstock have been lost, the survivors on this generally susceptible variety also seem to be showing some tolerance to decline.

But in general, Griggs said, trees with definite decline symptoms cannot be cured, and should be pulled when their production drops below the profit level. On the brighter side, replants on domestic rootstocks will grow. "Not one has been lost from decline in the 10 years of replantings in the Northwest," Griggs reported.

#### BERRIES

#### Strawberry Record Breaker

EXPERIENCE gained from a lifetime in strawberry fields and constant application of improved cultural methods helped Shirl Holt set one of the best records ever achieved on a 10-acre tract of Arkansas strawberries last year. Not only was the almost unbelievable production of an average of 800 16-quart crates per acre an unsurpassed yield in north central Arkansas, but his income of \$1000 gross return to the acre or \$10,000 for the field of Blakemore strawberries was one of the largest incomes ever realized in the state from a 10-acre field of berries.

Holt sold 4400 16-quart crates at the fresh fruit auction market at Bald Knob, Arkansas' leading berry mar-ket. Between 500 and 600 crates were picked for the Miller processing plant in McRae, White County, 21/2 miles north of his home. He estimated that 2000 crates of berries were lost by decay because of shortage of pickers during inclement weather,

During the main harvest season

only one-half of his field was picked each day, and his lifetime record oneday harvest of 438 crates from less than half of the field was attained last year. About 1000 crates were gathered by pickers for their own use.

Fruit sold at auction averaged \$4 to \$4.25 per crate. The processing firm paid 14 cents a pound for capped berries. Strawberry growers throughout Arkar sas regard the income of \$10,-000 gross returns as phenomenal.

Holt has applied several intensive cultural methods to which he attributes his record success. Almost two years before the field was set, 2 tons of lime were spread on each acre. Cotton was grown on the land the following year, and in the spring of 1958 he set the 10-acre tract to improved Blakemore strawberry plants.

Previous experience in berry growing had convinced him that wide beds of plants are most profitable, so his first aim was to obtain a heavy stand of plants. Rows were set 42 inches apart. The second-year growth of plants, which made the exceptional yield, had a 24-inch spread and growth was heavy.

Holt finds two advantages to broad beds of plant growth. The yield is much heavier, and during the cultivation season, the heavy plant growth keeps down other vegetation and thus saves much time, labor, and cost.

His strawberry fertilization program is very thorough. An average of 400 pounds of 10-20-10 fertilizer is applied to each acre in October or November. The following January 400 pounds of the same fertilizer analysis are applied to every acre. As a precaution against crown borers and other insect pests, he dusts the plants early in the spring with 20 or 40% toxaphene

Another vital operation is Holt's efficient irrigation system. He has two large farm ponds near the field. A relift pump beside his new 2-acre pond sends water through aluminum pipe to the field, which is about 400 yards from the water source.

Ordinarily, only two heavy applica-



Pickers at work on the Holt strawberry farm. Berry packing shed is in background.



Mr. Brye manages the 680 acre Jebavy-Sorenson Orchards producing 100,000 bushels of McIntosh, Delicious, Jonathan, Grimes

Golden and Northern Spies annually. Guthion helps him maintain top quality and appearance demanded by exacting customers.

# "Guthion provides first effective control of our most destructive apple pests...cuts spray costs 20%"

Reports Mr. Richard G. Brye, Jr., General Manager, Jebavy-Sorenson Orchard Co., Manistee, Mich.

# "Guthion alone also provides unequalled insect control on our peaches, pears and cherries"

"Every successful fruit grower must continually test new pest controls," states Mr. Brye. "So, we ran a 10-acre test on Guthion in 1959 on a block of McIntosh, Delicious and Jonathan varieties, We sprayed them four times at 14-day intervals, commencing 10 days after petal fall. The results were surprisingly good. Our test acreage received the least damage from two-spot mites in four years. The excellent control of mites, green aphids, red-banded leaf rollers and codling moths convinced us that a shift to Guthion exclusively in 1960 was mandatory."

#### **Guthion gives better appearance**

"We used Guthion alone in four sprayings last season on our entire 250 acres of apples," continued Mr. Brye. "Because of a late mite infestation we made a special miticide spraying in August, but we now feel that Guthion would have been equally effective had we made a fifth spraying after the normal 14-day interval.

"We must maintain quality . . . color, texture and size . . . to satisfy customer demand for fancy apples the year round. Guthion has provided just that, due to the excellent insect control and because the spray does not have the dulling effect that we had previously experienced with other insecticides.

"Guthion has also been equally effective in controlling our major insects on peaches, pears and cherries."

#### Guthion cuts labor and spray costs

"Spraying with Guthion at 14-day intervals saves 20% on labor and fuel costs because of the fewer total sprayings. One crew now does the job that required two or three crews when we had to maintain a seven day

schedule with complicated mixtures of other chemicals which provided what we now consider inferior pest control," Mr. Brye concluded.

#### Higher profits from Guthion

Here's why Guthion means more fruit profits for you. It is the *only* single insecticide that controls *all* major fruit pests, *all* season long. Guthion alone equals or surpasses the control of any complicated combination of chemicals.

Guthion lasts longer, too . . . eliminates worry about special insect build-ups, specific timing, and between cover sprays. To reduce your spray costs and get better insect control this season, use Guthion. It works!



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As any grower will recognize, elimination of main limb breakage is an important basic benefit that prolongs tree life, virtually eliminates orchard clearing costs, and stops sunburn losses that often result from main limb breakage. In addition, the strengthening of trees with this new method speeds harvesting with automatic shaking machines and minimizes tree damage from the use of such machines.

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East Main Street, Clarksville, Ark Phone Pleasant 42022; Nite PL 4-2722 tions are made through the sprinkler system during the most dry weather of summer or when needed. If the weather is very dry at picking time, applying water helps increase the berry yield.

Besides the unusually heavy production, there has been another exceptional angle. During three consecutive years his field furnished the first crate of ripe strawberries harvested in his area. And the Holt berry patch consistently produces berries later than the average Blakemore field in White County, Arkansas' outstanding strawberry-growing section.

Shirl Holt, his wife, and their adult son, Billy Joe, operate this berry farm. Up-to-date equipment and improved cultural practices help them grow the crop and about 120 berry pickers harvest the fruit. Pickers receive 6 cents a quart for picking and 10 cents a quart for capped berries.—Ralph Underhill.

#### Frost Control in Strawberries

WE seem to have solved the problem of protecting our strawberries from frost damage.

In the spring of 1959, after trying mulching with straw and various other methods of preventing frost, we tried Dow polyethylene film of 4-mil and 2-mil thickness in rolls 12 to 32 feet wide by 100 feet long.

The film was laid on the berry patch one evening when frost seemed likely. The same night, temperatures on the ground outside the cover went down to 28°, while thermometers underneath the film 3 feet away registered 38°.

There seems to be very little heat loss under poly film because the tiny droplets of moisture which accumulate on the underside of the film do not allow the infra-red rays to pass through and be lost into the atmosphere.

There was no apparent difference in the protection afforded by either 2- or 4-mil thickness. However, the 4-mil is much easier to handle, especially if a breeze is blowing. It was also evident that the wider sheets are faster and easier to apply.

Some of the film was left on the plants for two days at a time with no apparent injury. Between frosts the film was piled up in accordion-style pleats between rows and held down with bricks, rocks, or whatever was handy.

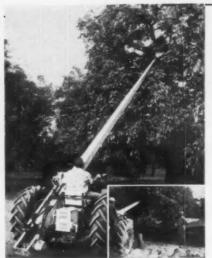
We believe frost prevention with polyethylene film is economically practical in cases where excess moisture would damage the plants or where berries are too remote from a water source.—David Friday, Hartford, Mich.

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#### STONE FRUITS

#### More Profit in Prunes

PRUNES are becoming an increasingly popular fruit, and new varieties being tested at Oregon State College, Corvallis, will add up to more profits for growers and better tasting products for consumers, says horticulturist Quentin Zielinski.

The Italian variety, long a mainstay of the prune industry, has certain disadvantages which researchers hope to overcome in other varieties



Italian is main prune variety grown in Willamette Valley. Its chief drawback: late ripening.

under test. The ideal is a sweet prune that ripens early, is fungus resistant, with firm flesh easily freed from the stone, and containing lots of sugar and little water. Among the 75 varieties being tested are several outstanding ones: Parson, Stanley, Moyer-Perfecto, Richards, Milton, Brooks, and Edwards.

Food technologist W. O. Sistrunk is in charge of evaluating the new varieties for fresh-eating and processing characteristics.

#### **New Apricots**

MOONGOLD and SUNGOLD, two new apricot varieties developed at University of Minnesota Agricultural Experiment Station, are winter hardy and adapted to areas east of the Great Plains.

**Moongold,** the earlier of the two varieties, is light orange, sometimes blushed or dotted with carmine. It is sweet with a slight acidity and is good for eating fresh and processing.

Sungold is a bright, clean gold with orange blush. It has a mild, sweet flavor, is good for eating fresh, for jam, and sauce.

Both varieties will be available from nurseries in Minnesota and adjoining states in the spring of 1961. They should be planted together to provide satisfactory pollination.



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scab, sooty blotch, Brooks spot, bitter rot, black rot and fly speck. Glyodin is excellent with ferbam or thylate for control of rust, x-spot and with zineb for other summer diseases. In such combinations, Glyodin costs you only 37 cents per 100 gallons of cover spray.

**Glyodin** is an ideal spreader-sticker. It gives smooth, clear, transparent protection without reducing leaf efficiency and without fruit discoloration. Used regularly, Glyodin suppresses mites so well it often saves the cost of special mite sprays.

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#### **NUTS**

#### **Liming Helps Pecans**

CONTROLLED liming of pecan orchard soils is an aid to nut production and does not induce rosette, a disease caused by zinc deficiency, a USDA scientist has found.

Experiments conducted at the Pecan Laboratory in Albany, Ga., by James H. Hunter, soil scientist of USDA's Agricultural Research Service, showed that lime enough to correct excessive soil acidity helps trees make more effective use of acid-forming fertilizers and winter legume cover crops, resulting in more profitable yields. By following this liming process, Hunter increased average annual nut yields three to four times on experimental plots.

He said declining nut yields in recent years can be traced to increased soil acidity caused by expanded use of acid-forming fertilizers and legume cover crops. Yields drop off as soils become too acid, resulting in calcium, magnesium, and potassium deficiencies in the trees.

Hunter's experiments, conducted over a period of several years, showed that lime should be applied before the

virtually no danger of flying sticks, stones

and other debris!



Vetch and rye cover crop failed to grow around pecan tree when the soil became too acid from the use of ammonium sulfate and zinc sulfate.

lower layers of soil become too acid. Surface liming, he found, acted slowly in correcting acidity in soil layers 8 to 30 inches below the surface. The quantity of lime needed for each experimental plot was determined by soil analysis tests.

To obtain yield increases under the experiments, applications of sulfate of ammonia at 10 pounds per tree were made on some plots and 8-8-4 mixed fertilizer was used on the others. All test plots also received a total of 15 pounds of zinc sulfate per tree in the first three years of the experiments.

Rosette was cleared in two years, but yields were unsatisfactory through the sixth year at which time lime was applied. Five years after lime was applied yields were seven to eight times more than before the lime application.

These research results are said to be applicable to pecan orchards on light-textured, acid soils in 12 southern and western states. Total pecan production in these states ranges from 125 to 200 million pounds a year.—

Pauline T. Stephens.

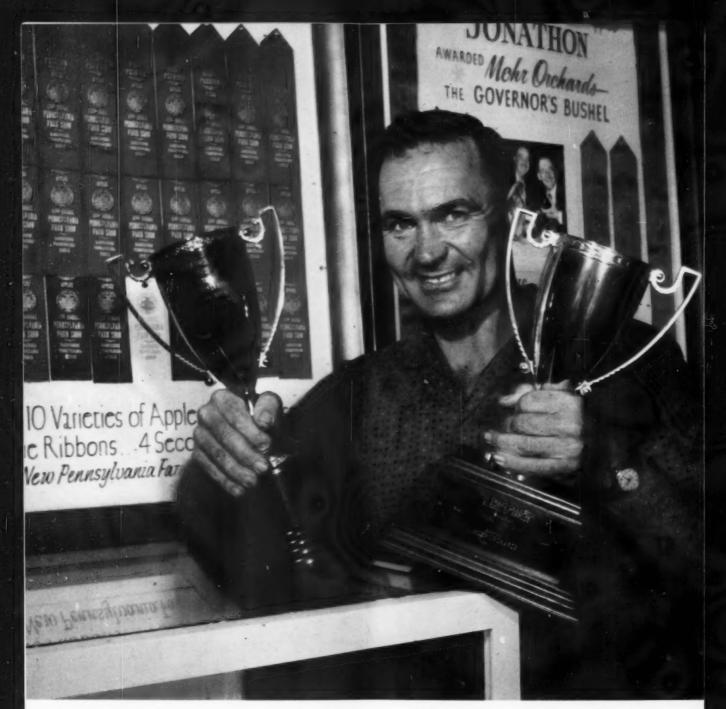


Same tree two years later. Soil acidity has been corrected through use of dolomitic limestone, applications of phosphate, potash. Note satisfactory growth of vetch, rye cover crops.

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Grand Champion Award for Jonathans and 22 ribbons out of 22 classes at the 1960 Pennsylvania State Farm Show . . . Grand Champion Award for Golden Delicious and 28 ribbons out of 28 classes at the same show in 1959 . . . plus 69 ribbons out of 69 exhibits at the 1960 Lehigh County Fair! Rewellien Mohr, of Mohr Orchards, Fogelsville, Pennsylvania, has been winning prizes ever since he started with an ORTHO Spray Program in 1954. He says, "These awards wouldn't have been possible without a complete ORTHOCIDE program. It's increased the number of Fancy grade from 20% in some varieties to 50% in others."



"Sweepstakes" Award and 50 ribbons out of 50 classes at the Ohio State Fair...first place in the commercial fruit display, and 95% of "firsts" in individual plate varieties at the Cuyahoga County Fair. Bill Eyssen, of Mapleside Fruit Farm, Brunswick, Ohio, has been capturing prizes ever since he started with an ORTHO Spray Program eight years ago. He says, "Our apples have been winning blue ribbons ever since we started using ORTHOCIDE. The fine finish we get with ORTHOCIDE has doubled our production of Fancy grade fruit. It's put us in the Fancy gift-pack business—all our varieties are bringing top prices."



Trophy and rosette for "best of show" at the 1960 New Jersey State Apple Show, plus plaques and ribbon for first place in Red Delicious and Red Stayman classes, and awards and ribbons for first, second and third places in the miscellaneous varieties class. Ernest Race, of Ernella Orchards, Belvidere, New Jersey, who has 150 acres in apples, says, "In my opinion, ORTHOCIDE is the greatest fungicide ever produced. It's put an end to the scab problem, produces healthier foliage, increases bud capacity and yield. From the standpoint of finish — ORTHOCIDE-sprayed apples will all make Fancy grade."



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HELPING THE WORLD GROW BETTER



#### By HENRY BAILEY STEVENS

Plain Talk to TWELVE thousand the Scientists members of American Association for the Advancement of Science heard a momentous speech by Sir Charles P. Snow in which he declared: "Atomic war within 10 years is absolutely inevitable the way we are going. . Soldiers have to obey, but scientists have to question and if necessary to

"Today we possess every scientific fact needed to transform the physical life of half the world and do it in our generation. . . . All that is missing is

the will."

rebel

And to the Women

IN similar fashion Louise Dickinson Rich in a recent article

lashes out that women, who with good reason hate war, are still doing much in their personal lives to encourage it: "We meet a boy home on leave and admire extravagantly his appearance in Air Force blues.

"We tell our children stirring tales of heroism on the field of battle. In short, we glorify war in many

small unheeding ways.

"No one's approval or disapproval counts half so much as that of women. If we would, in our everyday attitude and conduct, bring the full weight of this disapproval to bear on war, I really believe a long step toward lasting peace would be taken.'

Perhaps not only scientists and mothers but all other humans could benefit from such plain talk about our responsibility for this drift toward world suicide. Who can claim that he is doing everything possible to pre-

vent it?

Who Wants a Dog Fight Anyhow? Sickum!" calls

"'AT-A-BOY! out an eastern

fruit grower after reading our comments on the labor dispute. "This word may not be in your vocabulary, but it used to be common around the country store when we wanted to get a good dog fight started. It's a great sport as long as our dog isn't fighting." Oh, yeah? Take another look at that dog.

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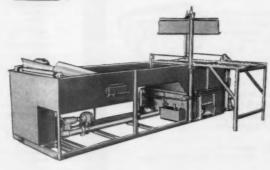
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#### GRAPES

#### Viniferas in the East?

ROM the quiet slopes of Keuka Lake, one of New York's famed Finger Lakes, come reports of a significant horticultural achievement. Amidst the vineyards surrounding the little town of Hammondsport, long recognized as the center of New York's champagne industry, is the 100-acre experimental vineyard of Gold Seal Vineyards, Inc. Walking through the vineyard, one might think

much earlier than American or labrusca vines and have shown excellent resistance to fungus diseases with the proper modern spraying program. And his experience here shows that vinifera vines are at least as freeze and frost resistant as some of the American varieties grown in the area, and more so than the more tender American ones.

During the winter of 1956-57 temperatures in the Finger Lakes region dipped to -20° F. Dr. Frank reports that the vinifera vines not only withstood the cold but even produced more grapes the following summer than some of the native hybrids.



Dr. Konstantin Frank shows clusters of vinifera grapes forming on vines grafted on native cold-resistant rootstocks in Gold Seal Vineyards, Hammondsport, N. Y.

he had been transported to the West Coast, for here flourishing on native rootstocks are vinifera or European vines.

These vines are not hybrids—they are pure vinifera vines grafted on vigorous, cold-resistant rootstocks gathered from New York and Canada by Dr. Konstantin Frank, director of research for Gold Seal. Most of these native rootstocks are of the riparia variety.

Dr. Frank long has been interested in viticulture. Before fleeing from Europe because of both Communist and Nazi persecution, he was an important land owner and managed a 2000-acre vineyard in the Ukraine. Despite the fact that horticultural experts said that vinifera vines could not withstand the severity of New York winters, he was convinced that vinifera vines, grafted onto native coldresistant rootstocks, would survive.

Dr. Frank searched far and wide through New York and Canada gathering rootstocks. Onto these rootstocks he grafted vines of such vinifera varieties as Pinot Chardonnay, Pinot Noit, Pinot Gris, Pinot Blanc, Aligote, Cabernet Sauvignon, and Johannisberger Riesling.

In test plots the vines, ranging in age up to six years, have produced

Gold Seal plans to have wines made from these pure vinifera grapes on the market this year. Production in the experimental vineyards and in the first commercial plantings to come in full bearing shows that an average of 4 or 5 tons per acre can be maintained easily. (Average yield for the same vinifera varieties in California is 2 or 3 tons per acre.)

Horticulturists are often skeptical of Dr. Frank's success with vinifera grapes in New York. They point out that vinifera vines have been killed to the ground by temperatures of 0° F. And they point to the fact that vinifera varieties can withstand such low temperatures only if the wood is well matured. Because of the shortness of the season it is unlikely, they claim, that the wood of these vines could have matured properly.

It is true that vinifera grapes have been grown in eastern regions on a very small scale. But in those instances the vines were always laid down and covered with earth for protection during the winter. Some of Gold Seal's experimental vines may be afforded some protection from wind by the location of the winery buildings but this is all the winter protection that is apparent.

However, Dr. Frank points out

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that there are two reasons why vinifera grapes have been killed by a temperature of 0° F. If they were grown on their own roots the vines would be weak because of the attack of the phylloxera or root louse, or if they were grown on certain rootstocks, there would be a delay in the maturing of the wood. If a period of warm weather occurred in the middle of winter followed by very low temperatures, the canes would be easily damaged because the sap would have started to come up in the wood again.

Another reason for skepticism is the fact that Dr. Frank claims the grafted vines are more resistant to fungus diseases than American varieties. Vinifera grapes are particularly susceptible to both powdery mildew and downy mildew. Downy mildew flourishes in humid regions.

Because of the ideal climatic conditions, vinifera production in this country is centered in California. the growing season varies There, from 150 to 240 days with the lowest mean temperatures in January ranging from 20 to 40° F. California also benefits from little or no humidity.

New York, on the other hand, has a growing season of 90 to 150 days. Mean temperatures in January dip as low as -10 to  $-15^{\circ}$  F. Humidity is generally high in the Finger Lakes

It is interesting to note that the vinifera varieties being grown by Dr. Frank are all either early or mid-season varieties and that they are grown in the three coolest regions of California.

This might account for the fact that they ripened well even during New York state's shortest growing season on record in 1958 when there were only 93 days between the start of bloom and the first freeze.

Dr. Frank points out that the rootstocks he is using are principally responsible for complete maturity of the fruit and the wood even during such a short growing season.

As yet, no one has been able to match Dr. Frank's amazing success with vinifera grapes. Grafted vines sent from the experimental vineyard to New York State Agricultural Experiment Station, Geneva, failed to survive. This might have been due partly to the fact that the vines were not growing strongly and partly to the fact that the average climate of Geneva is substantially colder than in the Finger Lakes region.

Will New York challenge California's monopoly on vinifera wines? Dr. Frank states, of course, that this monopoly is now ended. However, on a quantity basis it will depend on whether other growers are able to repeat Dr. Frank's success. THE END.

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Loudest and most reliable bird and animal scare device ever made. Operates on carbide or acety-lene, no wick. Retail cost is low. Operates for less than 15c per day. DEALER INQUIRIES INVITED. Warehouse stocks in: San Francisco, New Orleans, Or-lando, Chicago, Baltimore, and Greenville. No waiting for de-livery.

ivery.

REED-JOSEPH CO. firm

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				Paulu	

#### WEED CONTROL

(Continued from page 11)

apple and pear orchards, quackgrass can be controlled with 10 pounds per acre of 85% dalapon (Dowpon). Apply the chemical in the spring when the new quackgrass growth is about 3 to 6 inches high.

In nonbearing apple and pear orchards, 3 to 6 pounds per acre of Simazine 80W will control annual weeds and quackgrass if applied early in the spring. If quackgrass or other perennial weeds are much of a problem, a mixture of 1 pound per acre of Amitrole (Amino Triazole or Weedazol) with 3 pounds of Simazine will do an even better job. The accompanying photographs show the excellent weed control obtained in our tests with these chemicals.

Our recent research has also proved that excellent weed control may be obtained in established plantings of apples, pears, cherries,

DON'T IGNORE IT!

CAN you name the most expensive literature on the market today? No, it isn't the current bestseller or a tale from the classics; it is the label on your pesticide container.

Read those few, short, simply worded paragraphs carefully—they are the effective summing up of the results of from three to five years of research and development costing well over \$1,500,000. No other product in the world is more thoroughly tested before it is offered for sale than pesticides.

Don't ignore the label. Follow its instructions implicitly. Remember—it's to-day's most expensive literature, free at no extra cost.

peaches, and apricots with Simazine, and the Simazine-Amitrole combination. The tests show that weed control has been obtained with the 3 to 6 pounds per acre applications and no injury has occurred from higher applications. However this use is not yet approved by FDA.

Much better control of both annual and perennial weeds has resulted from early spring applications for three reasons. The annual weed seeds have not germinated, the new growth of perennial weeds is more susceptible to the chemicals, and rainfall is more apt to occur in the spring. Simazine does a much better job when moisture helps incorporate the chemical into the top inch or so of soil.

For tree fruit growers who have not used chemical herbicides before, here are some principles and thoughts which might help you develop a weed control program.

Know the chemicals you are using. The best way to learn about the chemical is to read the label. It pays, also, to be familiar with the weeds prevalent in your area, since certain chem-





Dig deeper holes—deep as 62" with extension on some 62" with extension on some model tractors. Auger sizes 4" to 24". Convertible—pull ONE pin and add HOOK—becomes CRANE BOOM—hundreds of uses. Detailed information on request, also free booklet "Guide for Better Fencing".

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**KWH Mistblowers** & Dusters, powered by gasoline engine

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"Sure-shot" control of early mites is the rule with Genite. Because Genite kills all stages of mites—even over-wintering eggs. Genite saves you money, too, because control lasts far into summer and you need fewer sprays later on. Results often continue into the following year!

Genite is virtually non-toxic to bees and other useful insects when used as directed. Recommended use is between delayed dormant and full bloom. Available in both 50% emulsifiable and 50% wettable powder forms. Get more "work" for your mite-control dollar with Genite!

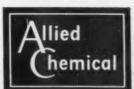
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Spreader-Sticker to all your fruit sprays

Sprays spread better, stick tighter and last longer when you add Plyac liquid polyethylene spreader-sticker. With Plyac, you stretch the time between sprays...do less re-spraying... increase the effectiveness of all your orchard sprays. What's more, there's no mess, no fuss, with liquid Plyac. Just add 2 to 4 ounces per 100 gallons, right in the spray tank...and you'll get more "work" for your spray dollar!

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Long lasting—Two or three applications normally provide effective all season control.

Controls late infestations — apply to strawberries within eight days of harvest. Economical — fewer applications, longer residual action, mean savings for you.

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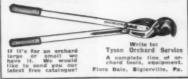
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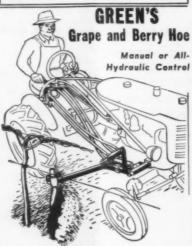


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Green's Tractor Hoe will save you time and money. One man can do the work of many. Fits most makes of tractors.

Send for free literature.

# Howard C. Green Mfg. Co.

Portland, New York

icals do not control various species of weeds.

Environmental conditions affect the activity of weed killers. The most important feature of environment is the soil. In general all herbicides applied to the soil work much better under moist soil conditions than dry conditions. Apply the higher recommended rates to heavy soils such as clays and clay loams. Use the very lowest rates on light sandy soils.

You must apply the recommended rate. In order to do this you must use the proper equipment and calibrate

the sprayer properly.

Apply herbicides in orchards at pressures of 20 to 60 psi and at 20 to 60 gallons per acre. Almost any sprayer available can be adjusted to do this job. All weed sprays should be put on with flat fan nozzles. These are the only type which will apply material accurately. Fifty mesh screens should also be used in the pumps, boom, and nozzles.

Spraying around fruit trees so that the area from the drip line to the base of the tree is covered presents a special problem with conventional booms. The best method of spraying may be to use a single swivel nozzle. These single nozzles broadcast bands from 6 to 12 feet wide depending on their adjustment. They apply the spray in a flat spray pattern.

One such nozzle is Spraying System Single Swivel No. 5000 ¼TOC 16 (Spraying Systems Co., Bellwood, Ill.). Remember that the calibration of this single nozzle must be done even more carefully than for a boom, because a slight adjustment in the swivel affects the area covered.

The importance of low-cost-perunit fruit production makes it imperative that growers obtain experience in the correct use of the new chemical herbicides and new application equipment. With that experience as a background, each grower can become his own weed control expert. The End.

# NEW FUNGICIDE REPORT

A REPORT recently issued by American Phytopathological Society, Subcommittee on New Fungicide and Nematocide Data, is entitled Results of 1960 Fungicide and Nematocide Tests. The report serves as a medium for organizing and presenting the summarized results of current fungicide and nematocide testing projects.

Copies are available at \$1 each when accompanied by a remittance, \$1.25 when invoiced and billed. Address orders to A. B. Groves, Winchester Fruit Research Laboratory, 2500 Valley Ave., Winchester, Va., and make remittance payable to American Phytopathological Society.

# FRUIT-O-SCOPE

SPECIAL MARKET REPORT APRIL, 1961 AMERICAN FRUIT GROWER

New York & New England Apple Institute's "Crisp-Aire" (controlled atmosphere) advertising campaign got off to a fast start in February with the first shipments of eastern McIntosh to the Los Angeles market. A huge newspaper and radio advertising program was touched off by L. W. Marvin, institute manager, who flew ahead to pave the way promotionwise. He even arranged nationwide television publicity for Crisp-Aire apples on Dave Garroway's show.

What's the outlook for Florida grapefruit? With an increasing national supply forecast for the next several seasons, Florida Citrus Mutual is recommending the following action: Increase advertising and merchandising...increase market research...grow the best possible quality...expand foreign markets... develop new and improved products ... reduce marketing and processing costs.

A good illustration of how co-operatives can co-operate is the way in which nearly all organized grape growers in the U. S. united to object to the low import duties on foreign wines. California, Ohio, South Carolina, and New York grape co-ops voiced a loud protest against this unfair competition. Such unified action is bound to have favorable results.

Where do spur type apple trees stand in the Northwest? Definitely in the limelight! Starkrimson, Red Spur, Wellspur, and Hardispur are being planted in considerable number. About 25 to 30% of the nonbearing Delicious in the area at present are spurred Red Delicious. And watch for the introduction of spurred Goldens ... and a spurred Winesap.

The outlook for California's plum industry looks good for the early 60's. Bearing acreage is likely to continue its present upward trend and reach a level of about 25,000 bearing acres by 1963. Farm prices are expected to remain steady or may rise gradually, if consumer purchasing power continues to climb near the recent rate. A further increase in yield per acre above the present 4 tons is also predicted.

Strawberry imports were way up in 1960. Imports of frozen berries by the U. S. from Mexico last year soared to 24,576,000 pounds, an increase of 10,512,000 pounds over 1959, according to latest Foreign Agricultural Service figures. Imports of fresh strawberries from Mexico last year amounted to 597,000 pounds, compared with 207,000 pounds in 1959.

How much does the peach grower receive for the contents of a can of peaches? Four and one-half cents! Yet, when a consumer buys a can of peaches serving from five to seven people, she pays 25 to 35 cents. Ralph Bunje, manager of California Canning Peach Association, asks: "Are the canning and distribution of peaches worth six to seven times as much in time and effort as the growing of them?

Processed Apples Institute is busy sending out recipes to food editors to promote their products for the first summer holiday...in May.

Mechanical harvesting of apricots is practically perfected...at least from the canners' standpoint. Canners' tests last summer showed that the selectivity of the machine was better than that of the hand worker and damage from mechanical picking was the same as damage from hand picking. Canners are very optimistic that apricot deliveries from mechanically harvested orchards will be of better quality than fruit from hand-picked trees.

West Coast flash ... The unions are working on college students these days. At University of Southern California in Berkeley, there's a chapter of SCAL (Students' Committee for Agricultural Labor). A six-page instructions manual has been issued.

# STATE NEWS

The Business Side of Fruit Growing

# CALIFORNIA

# Marketing Order Continued

FRUIT growers in the Golden state have voted to continue the federal marketing agreement and order program covering California-grown fresh Bartlett pears, early plums, late plums, and Elberta peaches.

The amended marketing agreement and order, originally effective May 29, 1939, requires that a referendum on continuance of the agreement and

order be held biennially.

According to a study by Agricultural Economist John F. Stollsteimer, a switch from the old lug boxes to the new bulk bins is not necessarily the best economics in fruit handling. When costs of containers as well as handling costs are considered, the bins win, Stollsteimer said. Bin costs are approximately 45% lower than lug costs per volume of fruit handled.

However, when handling costs alone and a small volume of fruit are involved, the minimum-cost lug system may be economical. For example, with 250 lugs per hour hauled 1 mile, the handling costs are held to a minimum by hand loading lugs on low-bed trailers for direct haul to the plant. As the length of haul increases this advantage drops rapidly.

# PENNSYLVANIA

# Promotion Tax Possible

NCREASED dwarf apple acreage, continued emphasis on quality control, more attention to small fruits, and perhaps a self-imposed tax for promotion and research are in prospect for the state's fruit growers following the 101st annual meeting of

State Horticultural Association of Pennsylvania.

Labor savings and earlier bearing were claimed for dwarfs by growers who are already harvesting a half-million bushels annually from these trees. In their emphasis on quality, growers planned tighter disease and insect control, and substitution of bulk boxes for field crates to minimize bruising. Bulk boxes also hold down handling costs.

Small fruits were recognized for their importance in the state's \$25 million fruit industry in a separate program devoted to varieties and production of strawberries, raspberries, and blueberries.

Enabling legislation was endorsed by growers. If enacted, it would permit growers to vote on a marketing order that would include a self-imposed tax for use by them in promoting fruits and in research.

# VIRGINIA

# Program for Action

PROGRAMS to overcome the apple industry's problems and handle farm labor were laid before the 64th annual convention of Virginia State Horticultural Society in Roanoke.

Charles Toan, secretary-manager of Frederick County Fruit Growers Association, told growers, "You have in effect turned the farm labor problem over to government bureaucrats—local and federal.

"The choice is yours. Speak up, make your decision, or be trampled in the dust. Accept the challenge that has been given you, or forfeit the right to control your own operation."

He suggested that growers improve their own migrant housing, pay a



TAR HEEL PEACH GROWERS ELECT
North Carolina Mutual Peach Growers Society
is headed this year by, left to right, Floyd
Haywood, Cander, vice-president; Clyde Auman, West End, president; and John Wyatt,
Candor, secretary-treasurer.

realistic piece-work wage, utilize all local sources of labor, emphasize to the employment service the need for competent pickers, urge statewide migrant housing regulations and the activation of a state migratory labor committee.

Toan pointed out that the key to the entire labor situation is that growers must participate on all possible committees concerned with labor problems.

"You must learn your rights," he said, "your do's and don'ts for dealing with labor organizations, pickets, and what you can and cannot do when your employees are being asked to affiliate with the union."

During the convention, B. R. Lacy, III, Front Royal, was re-elected president, and John F. Watson, Staunton, was re-elected secretary-treasurer.

# LOUISIANA

# Fresh Fruit Consumption

THERE appears to be an increased interest in fresh fruits and vegetables on the part of consumers. That's what Alan T. Rains, executive vice-president, told Florida Fresh Fruit and Vegetable Association members attending their recent 57th annual convention held in New Orleans.

He pointed out that the long decline in use of fresh apples is coming to a halt. Latest USDA figures show fluctuations, but no downtrend in consumption of apples in fresh form between 1955 and 1959. Consumption in both 1958 and 1959 was greater than in 1955 and 1956.

The same is true for other fruits, he said. The percentage of grapefruit and lemons used fresh shows no downtrend. The situation as to oranges is less clear, but if there is any



APPLES FOR DENTAL HEALTH

Fifth graders at Longview Elementary School, Raleigh, N. C., eating some of those good North Carolina apples in celebration of National Children Dental Health Week. Dr. J. S. D. Nelson, president, Raleigh Dental Society, at rear, right. The program included a showing of NAI's film, "Gateway to Health."



# Quality Appearance and Economy In These Colorful New Berry Cups...Stain-Proof and Moisture Resistant

Here's the perfect answer to growers and packagers who want the best at a distinct economic advantage.

These popular new two-tone cups are ideal for strawberries, bush berries, cherries and small fruits and vegetables. Designed for effective display value as well as utility, they retain their colorful stain-free appearance... and sturdy construction assures arrival of fruit at the point of sale with its most favorable appearance preserved. Available in standard quart size; shipped fully set up; packed 500 to a master container.



Samples and prices on request.

Ask for the new AGRICULTURAL PACKAGING CATALOG — giving detailed information on the complete Packaging Corporation line of baskets, containers and packs for all kinds of fruit, produce and horticultural products.

Planned Packaging moves produce

# Packaging Corporation of America

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continued downtrend, it is slight, Rains said.

He reminded members that with the 3.2 million net increase in population per year, an extra billion pounds (farm weight) of fresh fruits and vegetables will be needed each year just to keep up with the population

# OHIO

# Grape Co-op Planned

REPRESENTATIVES of northeastern Ohio grape growers have voted to join with several other states and Canada in organizing a big fruit processing and marketing co-opera-

The proposed co-op, tentatively known as American Fruit Growers Co-operative, would be located in North East, Pa. The aim is for a total grape volume of 40,000 to 50,000 tons, including grapes in New York, Pennsylvania, Washington, Ontario, and possibly Michigan.

Plans call for taking over facilities of Sunshine Packing Corp. of Pennsylvania in North East and processors in other growing areas. The growers' decision to organize co-operatively arose out of dissatisfaction with grape harvest returns and a year-long wait for full payment for the crop.

# WASHINGTON

# Help For Pear Growers

OOD news for pear growers in GOOD news for pears of the Northwest came recently from Dr. B. T. Shaw, administrator of Agricultural Research Service, Wenatchee. He advised that the 1962 budget, as submitted to Congress, contains an additional \$60,000 item for pear decline study in Washington and Oregon.

Dr. Shaw said his agency plans to divide the sum equally between crop research and entomology research in further study of the disease which has crippled Northwest pear production.

# PACKAGING & MARKETING

# Peachmen Discuss Promotion

PEACH growers representing 22 states gathered in Little Rock, Ark., in February for the 20th annual meeting of National Peach Council. The 300 or more growers who attended had no difficulty in agreeing among themselves that the peach industry must be more aggressive in promoting peaches and in protecting its own interests.

There was unanimity of opinion that more money must be collected to put important plans into effect. But, unfortunately, there is no sugar daddy to provide the funds, and peach growers don't seem to be able to do it by themselves.

At last year's meeting, plans were confidently made for an annual budget of \$30,000. This amount seems modest indeed to promote a freestone crop with an annual value of over \$100 million. But \$30,000 might well be \$300,000 to peach growers-it's just as hard to attain.

The problem lies with the state organizations. Only one, California, raises money for promotion under a state marketing order. In all the other states, peach funds are raised on a voluntary basis, which means in actual practice that only a few of the more progressive growers dig into their pockets-the rest get a free ride.

Contrast this with the apple industry, where Michigan, Washington, Virginia, Maryland, New York, and California have state laws or marketing orders which provide that all growers will share the cost of promotion equally.

What the peach council needs is strong state organizations whose funds are provided equally by all growers in each state. Michigan has an apple institute backed up by a state law. Why not a peach institute



On these men rests the future of the peach industry: National Peach Council officers for 1961, left to right, Don Bones, Littlerock, Calif., second vice-president; Carleton E. Heritage, Richwood, N. J., president; A. E. Bassham, Forrest City, Ark., past president and chairman of executive committee; and H. G. Riggins, Woodbury, Ga., first vice-president.

too? New Jersey, Virginia, North Carolina, South Carolina, and Georgia are all strong peach states.

It has been amply demonstrated that voluntary methods do not do an adequate or fair job of providing promotion and merchandising funds. Why don't the leaders in those states enlist the aid of state legislatures either for advertising laws or enabling acts making possible state marketing orders?

The situation of National Peach Council is doubly serious because Bob Rogers, secretary for the past several years, is resigning to take an important position with the Illinois State Department of Agriculture. Bob Rogers' enthusiasm and ability have breathed life into the council. Unless an adequate salary can be paid, the council will continue to lose valuable men like Rogers and Harold Hartley before him.

A worthwhile program the peach council has been able to carry on in recent years is the home economics

The COMPLETE Line





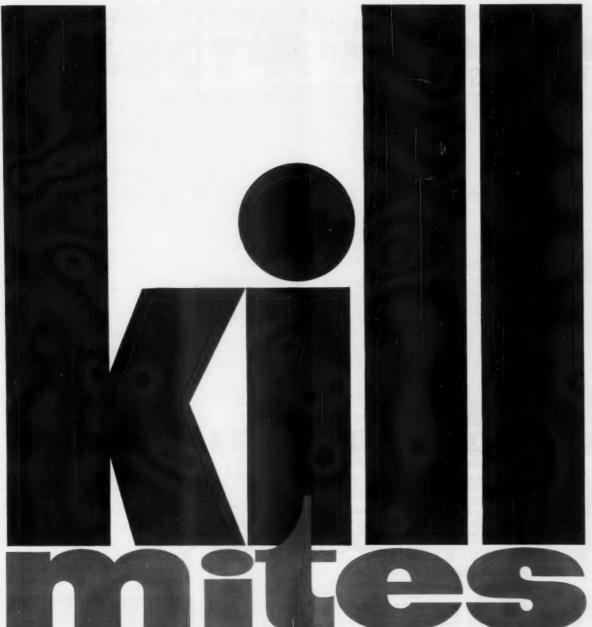
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Friend has the best sprayers and the sprayers best suited to your needs:—from the COMMANDER for all-round farm use or small orchards to the Big AIRMASTER 420. And FRIEND quality and dependability mean economy—in simplicity of operation and maintenance —and profit—by giving you the best in crop protection.

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apples; the same complex plus pear psylla on pears; red mite and twospotted mite on peaches, plums and prunes; grape leafhopper, two-spotted mite and Willamette mite on grapes; and for lecanium scale on plums and prunes. Harmless to foliage, ethion can be used with safety on all varieties except Wealthy and Melba apples. Ethion is tailored to your orchard program—an excellent summer miticide, it provides

extra protection against codling moth
—for fast action and long protection,
see your dealer now for ethion.

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# Available Now . . .

# **GUARANTEED DORMANT** FIRST CLASS TREES!

From C & O's ultra-modern fruit tree storage, where both temperature and humidity are carefully and accurately controlled, comes top quality nursery stock guaranteed by C&O to reach you in first class dormant condition!



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Destined to bring you **Greater Fruit Profits!** 

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Complete Fruit Tree Selection

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"The spreader with the controllable spread" (Pat'd & Pats, pend.)

Apply mouse bait, cover crop and fertilizer in-secticides and herbicides now in hours instead of days.

- 1. Control the width of spread from 2 to 40 ft.
- 2. Direct spread wherever desired. 3. Side dress or band applicate.
- 4. Seed and fertilize at the same time.

Why be satisfied with a one spread type applicator? P.T.O. driven, Now with quick mount attachments. Available in trailer or tractor mounted models.

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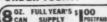


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TRESEAL Sayon valuable apple, peach, cherry, and other delicate monsy-making trees. Prune—and TRESEAL 'em for safety. A few pennins can nave a tree. Recommended by Orchardista, TRE SEAL is easy to use in cold or summer heat. Order a BIG SIZE CAN with brush

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# ARMY TYPE EXTRA HEAVY TREAD

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150 x 16 10 ply Nylon, new retread tire and new wheel

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**DEALERS** WANTED and publicity program. Lora Stone has done an able and enthusiastic job in obtaining thousands of dollars of free publicity for peaches in newspapers, magazines, radio, and TV. The story of the flavorful goodness of peaches has been carried to the farthest corners of the country. But Lora Stone has been seriously hampered by insufficient funds. This program needs a bigger, not a smaller budget.

With strong economic forces affecting the peach industry, group action is more important than ever before. Take the matter of research. The amount of research being done on peaches in the USDA and the states continues to diminish steadily. A leading USDA peach researcher, who used to have two assistants, now has

One reason that research work is not keeping up is that peach growers have an ineffectual or non-existent lobby in the halls of Congress and in the states. Strong state groups and a vigorous national council could change this trend.

National Peach Council meetings are always interesting and pertinent. Enthusiastic speeches are made, and useful information is exchanged. But the speeches are being made at the wrong time at the wrong place.

These talks should be made at the state level to convert growers who need to be convinced and legislators who don't understand. The disbe-lievers must be made enthusiastic supporters of state peach groups which have the power to raise money in order to protect and advance their industry .- R. T. Meister.

# **Permit Better Display**

**S**LIMMER and trimmer polyethylene bags have been introduced for five different produce items in nine package sizes. The bags permit a



Neater, more compact shelf display is possible with the new "Slim-Sell" polyethylene bags.

neater and more compact shelf display without decreasing the cubic foot capacity of standard produce bags.

Called "Slim-Sell," the new bags are printed in a three-color combination which varies according to prod-

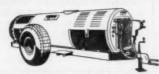
They are designed by Dobeckmun Company, a division of Dow Chemical Company.

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# HIGHEST PERFORMANCE LEVEL OF ANY SPRAYER IN THE WORLD ...



HARDIE DF-520 "DUO-FAN" AIR BLAST SPRAYER
Perfect for the medium size grower, delivering over 62,500
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Hardie exclusive patented "Duo-Fan" assembly isstandard equipment on all sprayers. Delivers 30% more air volume than conventional axial flow fans.



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# PERPETUAL CRISIS

(Continued from page 12)

record crop production year of 1956 they didn't go above 121/2 tons. Adding in "green dropped" fruit, cannery diversions, and culls - for which growers are not paid-the average yield per bearing acre doesn't exceed 141/2 tons.

The explosive expansion of cling orchards appears to have run its course, although cling acreage will edge upward in the next few years as trees already planted come into bearing. There is some hope, with an increased tempo of pullouts of inefficient orchards and a reduced rate of new plantings, that the total bearing orchard land may not exceed 60,000 acres.

Once explosive expansion tapers off into intelligent orchard replacement practices, there is no insurmountable hurdle in handling cling production if grower and packer alike will recognize—as the retail trade already has that clings can be sold as a menu staple rather than a luxury item.

To absorb potential production in the next four or five years without diversion programs, the peach industry salesmen may have to set their sights on a 40 million-case sale of all cling products-less than one standard can per each American family every fortnight.

There is no mystery to the record movement of peaches in the 1959-60 season. The sensational sale of 21,-485,000 cases of clings plus other cling products was due to an attractive price in the chain stores.

Canners probably didn't clear 20 cents a case above costs which is no great shakes as a profit return but it certainly provided to some 30 canners -however divided-an above cost return of about \$6 million. Growers didn't do half so well and there are 100 times as many farm interests as there are canneries to split the receipts.

No reputable grower is liable to get excited over cannery profits if he can get a respectable return for all of his crop. He recognizes that the cling processor must be successful if the cling producer is to be economically healthy.

His resentment is aroused only when he is confronted with a unilateral and unwarranted decision at the cannery level that the market shall receive only so much of his product because no concrete effort is going to be made to stimulate movement.

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**Exclusive Air Handling Makes the** Difference-Powerful, twin centrifugal fans send a high volume of air off the fan blades straight into tree foliage. Tapered outlet case directs a properly proportioned spray pattern into all areas of the foliage. Spray from both sides at once or, to increase foliage penetration, send all air out one side by adjusting sliding covers for right or left hand spraying.

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# **Specifications Myers Air Sprayers**

NUMBER	ENGINE	TANK	FAN	AIR-CLASS C.F.M.	REMOTE CONTROL DISCHARGE
58120-232ET5	Water Cooled Gasoline	500	Twin 32" Centrifugal Fans	80,000 at 80-90 MPH	Touch- Matic***
6095-227ET5	Water Cooled Gasoline*	500**	Twin 26" Centrifugal Fans	60,000 at 80-90 MPH	Touch- Matic***
6095-225ET4	Water Cooled Gasoline	400	Twin 24" Centrifugal Fans	45,000 at 80-90 MPH	Touch- Matic***
6040-A36ET4	Air Cooled Gasoline	400	Axial Flow 36"	30,000 at 60-80 MPH	Manual

\*6095-227ETS Also available with Diesel Engine.
\*400 Gellon Tank and High Pressure Piston Pump Optional.
\*Discharge valves activated through electrically controlled hydraulic system.

-ask your Myers Sprayer Dealer for a demonstration in your own orchard. He'll be glad to show you how a Myers air sprayer will improve your yield -increase your profits.



The F. E. Myers & Bro. Co. ASHLAND, OHIO KITCHENER, ONTARIO

# Versatile Digger

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9 BREEDS OF GUINEA HATCHING EGGS 20c each postpaid. KINGWOOD, Route 4, Box 285, Tallahassee, Fla.

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GRAY HAIR LIQUID IMPARTS COLOR TO gray or faded hair \$2.50. Rotor clips unwanted hair in nose and ears \$1.15. Postpaid. FEND-RICK'S, 114 North 6th Street, Allentown, Penna.

# HELP WANTED

WANTED: PACKING HOUSE MANAGER for Western Michigan area. Must be able to manage large operation, both packing and cold storage operation. Plant packs 300,000 busflel and is capable of 500,000 bushel of peaches and apples. Must know grading and how to handle help. Salary commensurate with ability, Write AMERICAN FRUIT GROWER, Box 217, Willoughby, Ohio. Give résumé of experience and background.

### MISCELLANEOUS

BANANA PLANT, GROWS ANYWHERE—indoors, outdoors. \$1.50. Postpaid. SOPHIA SULEN, Ladylake, Fla.

WRITERS WANTED FOR SPECIAL ARTI-cles. DEPT. 4, 5228 Irvine Avenue, North Holly-wood, Calif.

SUBSCRIBE TO GOVERNMENT SURPLUS weekly, lists all sales. Buy Jeeps, trucks, boats, tents, tires, etc., direct from government. Next 10 issues \$2.00. GOVERNMENT SURPLUS, Pax-

WINE-BEER-ALE RECIPES. FOR HOME use. Send \$1.00 to HOWE, Box 9031, S. Lansing 9. Michigan.

# OF INTEREST TO WOMEN

SEW APRONS AT HOME FOR STORES. NO charge for material to fill orders. In our fifth successful year. Write: ADCO MFG. CO., Bastrop 63, Louisiana.

HOME TYPING: \$65 WEEK POSSIBLE. DEtails, \$1. TREASURY, 709 Webster, New Rochelle AF-4, N.Y.

SCASH MAKING ARTIFICIAL FLOWERS Discount catalog 10¢. FLOCRAFT, Farrell 9

PLASTIC FREEZER CONTAINERS. SQUARE pints. \$9.95; quarts. \$15.00 per hundred, postpaid. Sample pint, 25¢. OXBORO, Box 7031 BP, Minneapolis 11, Minn.

# ORCHARDS FOR SALE OR LEASE

WITHIN 40 MILES OF DETROIT. 60 ACRE productive orchard. Apples, peaches and plums. Pear orchard and raspberries about ready to bear. Well stocked pond, modern 3-bedroom house, out-

productive orchard. Apples, peaches and plums. Pear orchard and raspherries about ready to bear. Well stocked pond, modern 3-bedroom house, outbuildings. AMERICAN FRUIT GROWER, Box 216, Willoughby, Ohio.

APPLE ORCHARD ON INLAND LAKE; 110 ACRE farm; about 82 acres of orchard in bearing age, principally Red and Golden Delicious, Jonathan, MacIntosh, Wealthy, and others for better pollination. Served by entomologist. Beautiful setting above lake, A-1 air drainage. Packing house, barn for storage, tools, tractors, truck, power sprayer and other equipment. Going business. Fine investment. Half mile lake frontage, ideal for development without marring beauty or value of orchard; a very rare combination. Spacious fine ten room home with ten baths, fireplace and heating plant, view of lake in three directions. Owner's illness prompts sale at \$90,000; terms available. For appointment, please contact DAVID ANDREASON, Sawyer, Michigan; phone: New Troy, HAzel 6-1717 or 6-1292.

250 ACRES ORCHARDS, 100,000 BU. COLD storages and packing house. For rent, lease or sale. MILLS BROS. ORCHARDS, R. D. No. 2, Middletown, New York.

WELL DIVERSIFIED 140 ACRE FARM with cherry and peach orchards, asparagus, and buildings on north side of paved road; with 60 acres for grain, alfalfa and pasture on south side (only). Few minutes' drive to new express freeway and town. Ample irrigation pond; fine air drainage; good land. Tools, tractor and equipment; eight room master home; good farm manager's home; fruit and dairy barns; pickers' cottages and other buildings. Subdivision potential; 15 minutes to St. Joseph and Benton Harbor; 30 minutes to Kalamazoo. Aerial photos available. Price \$65,000, terms available. Present owner here 60 years; retiring. For appointment, please contact DAVID ANDREASON, Sawyer. Michigan; phone: New Troy, HAzel 6-1717 or 6-1292.

THIS HILLTOP ORCHARD FARM OF 75 THIS HILLTOP ORCHARD FARM OF 75 acres, fronting on two roads with main buildings at west end and tenant home at east road, has 20 acres in cherries, 40 acres in apples of bearing age, 34 acre asparagus, balance for berries and other crops. Excellent air drainage; served by entomologist. Few minutes to town; handy to new freeway. All tools, 2 tractors, truck and power sprayer. Successful neighbor orchardist interested in its operation. Owner must retire. Price \$40,000; terms. For appointment, please contact DAV-ID ANDREASON, Sawyer, Michigan; phone: New Troy, HAzel 6-1717 or 6-1292.

OHIO APPLES—65 ACRES—MOSTLY 10 years. Good location, storage, houses, equipped. Bargain. 45 ENFIELD, St. Louis 32, Missouri. FOR SALE: 47 ACRE PEAR ORCHARD, house. J. FITZGERALD, Gold Hill, Oregon.

nouse. J. FITZLERALD, Gold Hill, Oregon.
COLORADO IRRIGATED ORCHARD. 20
acres. Modern 6-room native log home. Full basement. Two story, well-equipped packing shed. Two
labor houses. On state oiled highway. 7 minutes
town. Wonderful climate. HAROLD MOTZ,
Palisade, Colo.

### PERSONALS

PRACTICE DAILY BIBLE READING.

### RABBITS

RAISE ANGORA, NEW ZEALAND RABBITS on \$500 month plan. Plenty markets. Free details, WHITE'S RABBITRY, Mt. Vernon, Ohio.

### SALESMAN WANTED

SERVICE YOUR AREA—AGENTS, DEALers, Farmers make \$125 up weekly distributing nationally advertised Campbell's Gro-Green Liquid and 100% Soluble Crystal Fertilizer Concentrates. No investment, Samples free—dieal proposition for corn and feed men. CAMPBELL CO. (Est. 1928) Rochelle 6, III F11.

Rochelle 6, III.

SENSATIONAL NEW LONGER-BURNING light bulb. Amazing free replacement guarantee—never again buy light bulbs. No competition. Multi-million dollar market yours alone. Make small fortune even spare time. Incredibly quick sales. Free sales kit. MERLITE (Bulb Div.), 114 E. 32nd, Dept. C-74C, New York 16.

# SEPTIC TANKS, CESSPOOLS

SEPTIC TANKS, CESSPOOLS, OUTDOOR toilets. Keep clean and odorless with Northel Septic Tank Reactivator. Bacterial concentrate breaks up solids and grease—prevents overflow, backup odors. Regular use saves costly pumping or digging. Simply mix dry powder in water—flush down toilet. Non-poisonous, non-caustic. Six months supply only \$2.95, postpaid (money-back guarantee of satisfaction), or rush postcard for free details. NORTHEL, FV-4, Box 1103, Minneapolis 40, Minnesota.

# SITUATION WANTED

NEED WORKERS??? HARD WORKING farmers and ranchers (men only) from central Mexico want permanent year around jobs in U.S.A. Allow 5 to 6 months for arrival of workers. For free details, write: S. D. CORONA (AFVG), Apartado 184, Guadalajara, Mexico.

MIDDLE AGE MAN WANTS CONNECTIONS in orchard with base plus percentage. Have degree in horticulture and several years orchard experience. Write AMERICAN FRUIT GROWER, Box 218, Willoughby, Ohio.

# SPARROW TRAPS

SPARROW TROUBLE? TRAP THE PESTS. Free information, JOHNSON'S, Waverly 12, Kentucky.

STOP FEEDING SPARROWS. MAKE YOUR own trap and catch thousands. Free particulars. ROY VAIL, Antwerp 27, Ohio.

# SWEET POTATO PLANTS

NANCY HALL, YELLOW YAM, VELVET Reds, Bunch Parts, Redgolds, Allgold, Ga. Reds, Early Parts and Copper Skin. 200—\$1.50, 500— \$2.50, 1,000—\$4.00, 10,000—\$5.50, 0. Quick ship-ment. THRIFT PLANT FARM, Gleason, Ten-

# SWEET POTATO PLANTS

PORTO RICOS—NANCY HALLS—"BUNCH" ALL GOLDS—RED GOLDS—GOLD RUSH 500-\$2.50 200-\$1.50 1000-\$4.00 FREE "GROWING POTATOES EVERYWHERE" STEELE PLANT COMPANY

# U. S. GOV'T SURPLUS

JEEPS \$278.00, PLANES \$159.00, BOATS \$7.80, generators \$2.68 are typical government surplus sale prices. Buy 10,001 items wholesale direct. Full details, 627 locations and procedure only \$1.00. SURPLUS, Box 67, Thomasville, Penna.

### VEGETABLE PLANTS

MARY WASHINGTON ASPARAGUS plants. State inspected. 100 plants \$6.50 postpaid. 2 years old. RUDOLPH SZEWCZYK, Paw Paw, Michigan, Route 3.

2 years old. RUDOLPH SZEWCZYK, Paw Paw, Michigan, Route 3.

FREE CATALOG FEATURING OUTSTANDing commercial varieties of tomatoes, sweet and 
hot peppera, onions, cabbage, broccoli, cauliflower 
and lettuce. Also hybrid tomatoes, onions, eggplant. Widest selection of vegetable plants for market growers. Our outdoor grown plants are much 
hardier than hothouse plants and are rushed to you 
direct from our fields by fast express. Write for 
information on loading your truck at our packing 
shed with freshly dug plants. All plants are grown 
under Georgia Department of Agriculture Certification program from the best seed obtainable. Special quantity prices. Write today for our 55th 
anniversary catalog. PIEDMONT PLANT COMPANY, Dept. 801, Albany, Georgia.

SWEET POTATO PLANTS. GUARANTEED. 
Improved Portoricos, Nancy Halls, Red Golds, Copperskin Goldrush, Vineless Portoricos. 200—\$1.50; 
500—\$2.50; 1,000—\$4.00; 10,00—\$5.00. FREE 
Growers Guide. STEELE PLANT COMPANY, 
Gleason, Tennessee.

# WANTED TO BUY

WANTED: NEW OR USED GRADER AND apple cider press. Write to JOHN WEBEL, 1165 S. Diamond, Mansfield, Ohio. WANTED: USED JOHN BEAN SPEED sprayer. SIGLER'S ORCHARD, 3944 No. 62, Kansas City, Kansas.

# WILLS

MAKE YOUR WILL! IMPORTANT! INEX-pensive. Two finest quality Will Forms only \$1.00. NATIONAL, Box 48313P, Los Angeles 48, Calif.

# HAVE

# You can be FREE from TRUSS SLAVERY

Surely you want to THROW AWAY TRUSSES FOREVER, be rid of Hernia Worries. Then Why put up with wearing a griping, chafing and unsanitary truss. For there is now a new modern Non-Surgical treatment that is designed to permanently correct hernia. These Non-Surgical treatment sare so certain, that a Lifetime Certificate of Assurance is given.

Write today for our New FREE Book that gives facts that may save you painful, expensive surgery. Tells how non-surgically you may again work, live, play, and enjoy life in the manner you desire. There is no obligation. Excelsier Medical Clinic, Bept. M8628, Excelsier Springs, Me.

# SAVE UP TO 50%

NATIONAL BRANDS of Watches, Binoculars, Luggage,

RUSH \$1.00 FOR DISCOUNT CATALOG AND LEATHER GIFT WALLET

FIDELIS WHOLESALERS Box 224, Niagara Sta., Buffalo, N.Y.

# The Hired Man

When I was ten or thereabouts
I had a special friend,
Who used to tell me stories I
Could scarcely comprehend.

For eight months every summer he Was called our hired man. He helped my Dad so much that I Became his ardent little fan.

I'd always follow back and forth Behind his team and drag; I tried to keep him company Till both my knees would sag!

He knew our apple trees by heart,
And where the bugs were too;
He knew each tree in every row
On which the big ones grew.

He picked 'em all in barrels then, And topped 'em off with facers. He never picked a whippletree, Nor lost a bet on pacers!

He knew just where the crupper went, And thill straps didn't phase him! And how he could turn out the work, If you took time to praise him! His wages were his bed and board Plus just a little cash. You should have seen him stow away My Mother's brand of hash!

Each evening after supper when The light was slowly dimming, He'd take us boys down to the creek, Where we'd all go in swimming.

He always took a piece of soap
To scrub the grime and dirt off.
We kids would try to push him in
Before he got his shirt off!

We ran and dove in off the bank With lots of belly whackers; And those who didn't dare to dive Were doing bottom smackers!

We seldom ever used a towel;
He never used a comb.
We'd stay until the skeeters chased
Us up the lane towards home.

He loved to visit with us boys, And we sure liked to listen. He taught us fellows many things That modern kids are missin'.

-Albert L. Mason Albion, N.Y.

# Fruit Talk

"There are no harmless substances; there are only harmless ways of using substances."

The most widely grown fruit in the world is the grape, with production of 43.1 million metric tons in 1959, of which 34.2 million are used for wine.

Oland of Norway suggests that high concentration (even toxic) applications of foliar sprays may be useful for apple trees (4%) applied in late fall just prior to leaf fall, so that the nutrients may be taken up by the leaves and translocated and stored in the tree—even though leaves are injured. The N content of spurs was increased 31% and terminal shoots 16% by 4% urea. The amount of N absorbed from a single spray was comparable to a net intake of 30 to 40 kg N per hectare (30 to 40 pounds per acre).

Promising reports come from Oregon regarding the mechanical blackberry harvester, which straddles the row, shakes the vines, and catches the fruit on conveyor belts that move the berries into crates.

Gibberellin inhibits rooting of cuttings, say Brian, Hemming, and Lowe of England, who theorize further that the effect is direct and local in preventing cell division and root primordia formation in the root.

It may surprise some to know that nectarine production in the United States has reached 39,000 tons, compared with 64,000 tons for figs, 78,200 tons for the sweet cherry, 27,000 tons for the olive, 26,000 tons for the date, 73 tons for the avocado, and 62,000 tons for the cranberry.

And it is interesting to note further that pomegranates reached 3000 tons in 1959, and that persimmons were 2700 tons.

If you are wondering how it is that viruses upset a plant, Wilkinson of England has found abnormalities in cell division which suggest that virus particles, multiplying within the cells, compete with nuclear substances for certain chemicals (RNA) located in the nucleus.

Dalapon, applied as a weed killer around apple trees on EM II rootstock caused no injury to the tree, but the same variety on EM I showed injury, possibly due to the higher proportion of fibrous roots close to the trunk and near the soil surface for EM I rootstock.

The first commercial CA storage was built in 1928 in England—33 years ago.

Mechanical harvesting is creeping into the apple and pear industry, the idea being to hand pick the best fruit from mechanical platforms, and then to shake the rest. And the harvester can be used for thinning fruit by shaking the tops of trees lightly, followed by a touch up with pole thinning from the ground.

—H.B.T.

# **Coming Next Month**

- Blueberry Varieties You Should and Should Not Plant
- How the Brownell Twins Make a Profit on Peaches
- Mechanizing the Grape Harvest
- Black Raspberries Flourish in Black Plastic Mulch

# Processed vs Fresh Fruit

SOMETIMES one draws erroneous conclusions from simple figures which are lumped together. That is to say, someone in California would be misled if he accepted the percentage increase in population for the entire United States as an indication of what was happening in his state. Only by being more specific and by breaking the figures down for critical examination, state by state and region by region, can one arrive at a proper understanding.

This is the error we often fall into when we look at census figures and other large groupings. The increase in processed fruits is a case in point. Thus, the figures show that since 1935 there has been a substantial increase in the amount of fruit processed. But, this increase is made up largely of processed citrus fruits.

In 1935, the amount of processed citrus fruit was almost negligible. Today it constitutes approximately half the crop. And while there has been some increase in processed noncitrus fruit as compared with fresh fruit, the figure is not so large as some would like to believe.

Similarly, figures in the per capita consumption of fruit sometimes give the conception of a nice increase. But here again, if the figure for processed citrus is deducted, the picture does not look so good.

There is plenty for the industry to do if we wish to hold our own in the highly competitive society in which we live. Let's not be caught napping by misreading some of the rosy pictures that sometimes appear. They may not apply to all of us.

# Fruit Growing is Such Fun!



"It takes experience, son."

# THEY WORK HARDER BECAUSE THEY RIDE EASIER!

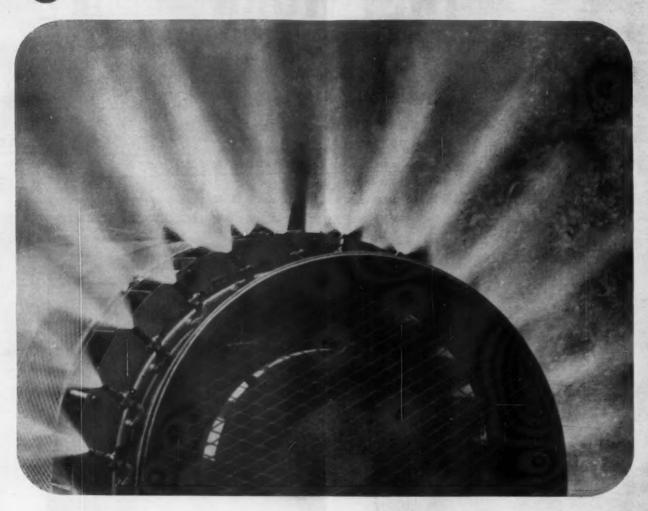


Shown here are the Corvair 95 Rampside and a Chevrolet Fleetside-both right at home on a farm.

- WORK-PROVED CHEVROLETS Whatever the job—hauling perishables, livestock, makes no difference what —Chevy IFS (Independent Front Suspension) means easier going for the driver and the load. Here's a truck ride that protects fragile cargo and lets you get more work done in a day. And a Chevy IFS truck costs less to maintain because there's less tire abuse and wear and tear on the sheet metal. Put a Chevy IFS truck to work for you (pickup, stake, whatever you need) and you'll see what we mean!
- REAR-ENGINED CORVAIR 95's They carry up to 1,900 lbs. on a nimble 95" wheelbase and handle like no truck you've ever driven before! Single unit body-frame is built to take it. 4-wheel independent suspension soaks up road shock and vibration. Air-cooled rear engine never uses water or antifreeze. Everything about them spells economy and long life! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.



# CAPTAN SPRAYS GIVE YOU



# 3-WAY SCAB CONTROL plus

Pre-bloom to harvest, nothing beats captan fungicide for apple scab and summer disease control.

The reason is simple. Applied before an infection period, captan protects fruit and foliage from infection. Applied shortly after infection occurs, it kills the scab fungus. And applied when scab spots first appear, it inactivates the spots and prevents further infection. This three-way action is one reason why captan is the most widely used apple fungicide.

But there is a big added plus. Growers who have used Stauffer Captan 50-W all season long find that scab control becomes easier each succeeding year because less scab overwinters. As a result, many growers get good control with as little

as one pound of captan per hundred gallons of water.

What's more, Stauffer Captan and MAGNETIC® "70" Sulfur Paste (or Stauffer MAGNETIC "95" Wettable Sulfur) team up to control scab and powdery mildew in pre-bloom and blossom sprays on apples. The same combination is safe and effective in blossom, petal fall, shuck and cover sprays on peaches.

Nothing beats Stauffer Captan, the all-season quality fungicide that pays off big at harvest . . . on apples, peaches,

cherries, grapes, pears, plums and berries.

See your dealer. Write for new pamphlet. Stauffer Chemical Company, 380 Madison Avenue, New York 17, New York.



